

KINGSTON ASH RECOVERY PROJECT MONTHLY REPORT

January, 2013

Aerial Image of Kingston Ash Slide (01/04/2013)



Filename: ImageOnly_20130104_8x11

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Feet

Date of imagery: 01/04/2013

Tennessee Valley Authority
Realty, GIS & Land Records

KINGSTON ASH RECOVERY PROJECT

MONTHLY REPORT

January, 2013

SAFETY

- Nineteen (19) individuals attended site-specific Health, Safety and Environment (HSE) orientations during January, 2013 – 2,306 project-to-date. Zero site-specific refresher courses were conducted during the month of January, 2013 - 435 project-to-date.
- Sixty (60) Safety Observation Reports (SORs) were submitted during January, 2013 – 3,729 year-to-date; 3729 are closed.
- There was one (1) First Aid for January, 2013. At approximately 4:00 pm, a Geo-Con laborer working in Segment 7 was dragging high pressure grout hose into position. The laborer had the hose draped over his left shoulder and was pulling with both hands when he described hearing a “pop” and feeling pain in his left wrist / thumb. The individual did not report the incident to management until the next morning. Geo-Con safety took the laborer to the TVA site medic for evaluation at approximately 7:30 am on January 22, 2013. The worker was given first aid (cold pack and ibuprofen) and was wrapped with an Ace bandage. The laborer was released back to duty and was instructed by the TVA medic to return to the clinic in the morning or sooner, if required, for a recheck on his condition.
- There was one (1) OSHA Recordable for January, 2013. On January 28, 2013, at 10:15 am, an SCS staff augmented GUBMK teamster was operating a tri-axle dump truck spreading 57 stone by tailgating for repair of a road over a rough cut clay surface in the old Gupton Farm area. The truck began to slide down an approximately 10:1 grade and as the teamster attempted to correct with steering, the truck tipped to the driver side where it came to rest on the ground. The teamster removed his seat belt, exited to the ground through the passenger window, was transported to site medical, and then transported to Roane Medical by ambulance for further evaluation. The teamster was treated for an abrasion to the shin and contusion to the shoulder. Individual was released from Roane Medical back to full duty with prescribed pain medication.

INFRASTRUCTURE / ASH MANAGEMENT

- Efforts for site maintenance, dust control, and HAZWOPER control continued.
- Continued recovering cenospheres from the onsite ponds.
- Continued borrow excavation.
- Started Kingston Entrance Restoration project.

ASH SLURRY AND POND TOTAL SUSPENDED SOLIDS (TSS) CONTROL

- Daily total suspended solids (TSS) sampling and pH monitoring were performed throughout the ash slurry system. The TSS of the Main Ash Pond effluent (Agri-Drain outlet) averaged 85.6 mg/L and the Stilling Pond effluent averaged 16.6.5 mg/L for January, 2013.
- TSS sampling was performed twice per day during placement of fill in the Stilling Pond for the Segment 3 buttress which was completed during January, 2013.
- Final survey of Segment 3 buttress was completed on January 31, 2013 and data sent to Stantec after processing.
- A bathymetric survey of the Stilling Pond was performed on January 31, 2013 and an updated map and volume is being prepared.
- The Ash Pond effluent polymer addition (Agri-Drain location) rates were adjusted based on TSS levels during January, 2013. Ascetic acid was applied to control pH in the Stilling Pond.
- The plant began January, 2013 with 2 units online; ramped up briefly to all 9 units and ended January, 2013 operating 4 units.
- Bottom ash was dipped during January, 2013 from the Sluice Trench.

PLANT ASH STORAGE / INTERIM ASH STORAGE AREA (BALLFIELD)

- Trans Ash placed and compacted dry fly ash during January, 2013.
- Geosyntec provided Quality Control and Assurance during January, 2013.
- The Kingston Fossil Plant (KIF) operated from 2 to 9 units during January, 2013 - average of 3.83.

CENOSPHERE CONTROL ACTIVITIES

- Daily pond inspections were performed for all ponds.
- Collection of cenospheres by hydro-vacuum truck was not carried out in January, 2013.

ROUTINE MONITORING

Surface Water Sampling

- Continued routine surface water monitoring. All monthly Stilling Pond results received to-date have shown compliance with the outfall National Pollutant Discharge Elimination System (NPDES) permit.
- There were rainfall events on January 1, 9, 13, 17, and 30, 2013 that triggered storm flow sampling in Swan Pond Embayment.
- Automated monitoring stations (Hydrolabs) are online continuously monitoring surface water conditions at 5 locations in the Settling Basin, Clean Water Ditch, Ash Pond Agri-Drains, and Stilling Pond. Continued daily TSS monitoring at the ash pond Agri-Drains and Stilling Pond.

Air Sampling

- With the exception of January 29, 2013, all air monitoring results for January, 2013 from the PM2.5 TVA air samplers were below the current Ambient Air Monitoring Plan (AAMP) action levels. On Tuesday, January 29, 2013, the ambient air PM2.5 24-hour average from the continuous ambient air monitors located at the site perimeter equaled or exceeded the 26 µg/m3 KRP AAMP action limit. An investigation indicated that regional levels were also elevated and activities at the site did not contribute to the PM2.5 levels at the site perimeter.

Data Management

- Provided monthly surface water and air monitoring results to the EPA.

Non-Routine Sampling

- Continued sample collection and on-site moisture testing in support of Dredge Cell and Ballfield operations.
- Continued confirmation sampling support for Middle Embayment ash removal.
- Continued spoils runoff sampling from the two tanks of spoils material associated with the Perimeter Wall Stabilization (PWS) project.
- Collected two used oil drum samples from Geo-Con drums for waste profile analyses.

DREDGE CELL

- Ash stacking was severely curtailed during January, 2013 due to prolonged wet weather conditions.
- TVA continued stockpiling materials in the Dredge Cell.
- Geo-Con continued predrilling / jet grouting for repairs in Segment 7.
- Stantec submitted 60% design for Segment 6 platform.
- Completed excavation for the Segment 6 platform; design changes required rebuilding the pad outward by 20 feet. Continued Segment 5 platform preparation.
- Mt. Carmel continued lime treatment of spoils in boxes alongside Drag Line Road.
- Griffin began installing deep wells for dewatering of Segment 6.
- S&ME installed new piezometers in Segment 5 and continued coring in Segment 7.

LATERAL EXPANSION

- Geo-Con operated two rigs in Segments 3 and 4. Wet weather interrupted operations for 1 week during the middle of January, 2013.
- Ash stacking was severely curtailed during the month due to prolonged wet weather conditions.
- TVA completed construction of a rock buttress in the Stilling Pond alongside Segment 3.
- Griffin operated the dewatering system in Segment 4.
- S&ME continued coring in Segment 2

RIVER SYSTEM RESTORATION

- No work was done on this task, as we await review of the Removal Action Work Plan (RAWP) for the River System by EPA / TDEC.

EMBAYMENT RESTORATION AND RECREATION AREA DEVELOPMENT

- Revised Lakeshore Phase 1 Scope of Work and provided to bidder for revised pricing.

MIDDLE EMBAYMENT

- Ash removal from the Middle Embayment was carried out only 12 days during January, 2013 due to adverse weather.
- Weekly Middle Embayment status reports were submitted.
- Rock from T-2 sediment pond was recovered for use in other features.

OUTREACH / COMMUNICATIONS

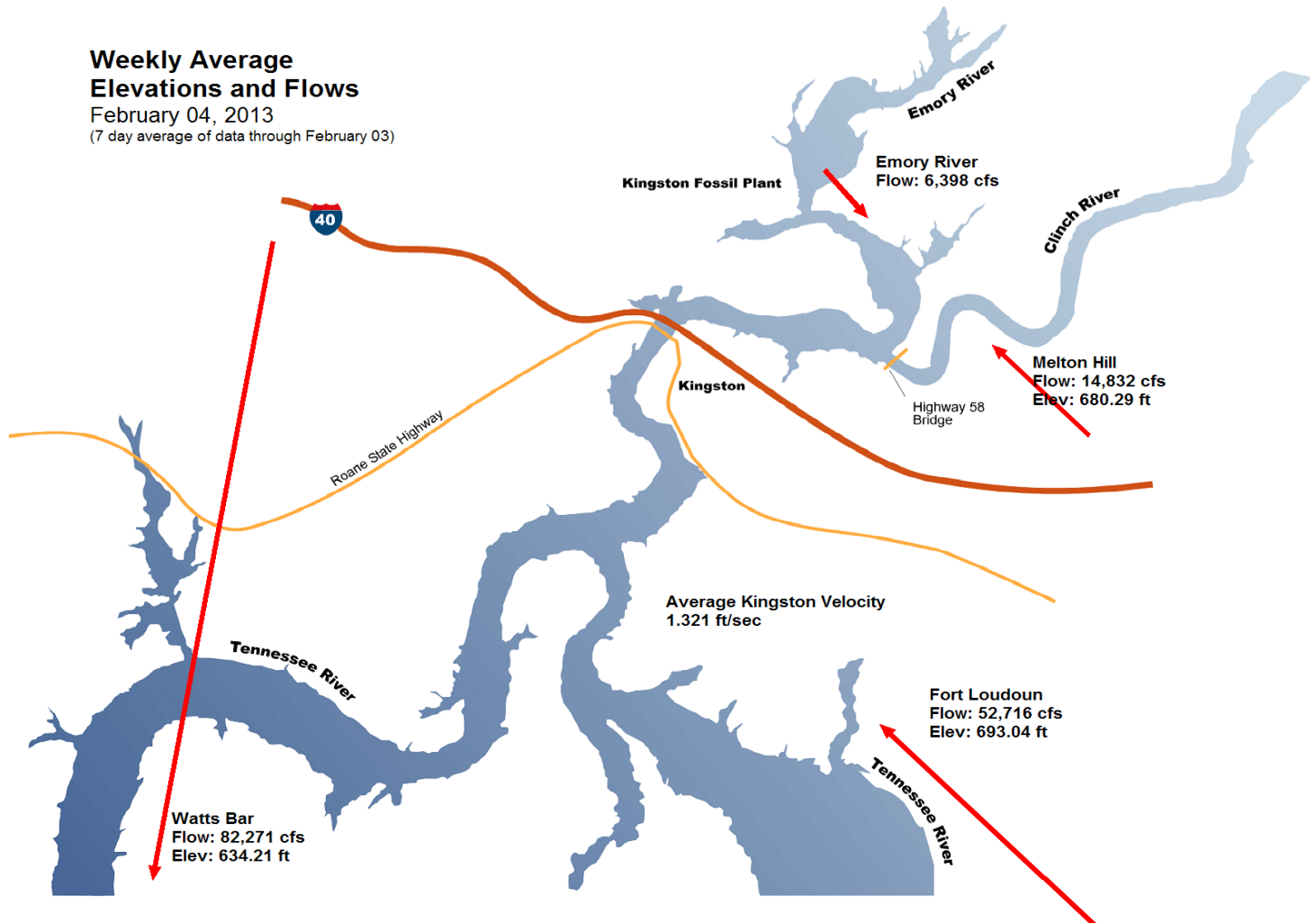
- Added weekly area resident updates to Kingston Ash Recovery website.
- Sent weekly updates to the Community Advisory Group (CAG), public officials and members of the public who have signed up to receive weekly emails.
- Escorted film crew from Christian Broadcasting Network doing a story on the Ash Spill. Air date to be determined.
- Met with CAG to provide an update on the project.
- Updated administrative record with work plans and relevant documents.
- Continued to respond to calls from residents.
- Updated site bulletin boards.

RIVER OPERATIONS

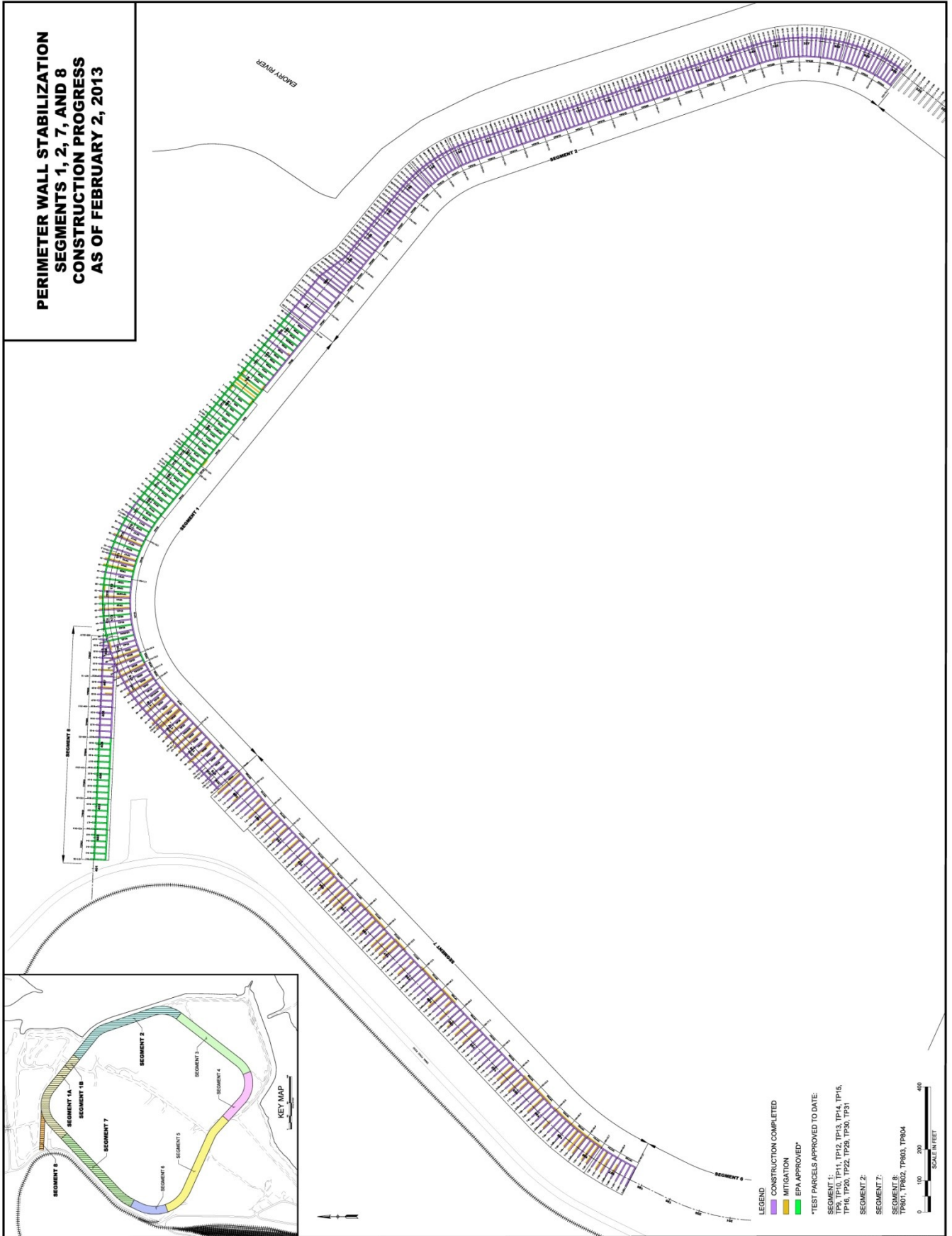
Weekly Average Elevations and Flows

February 04, 2013

(7 day average of data through February 03)



**PERIMETER WALL STABILIZATION
SEGMENTS 1, 2, 7, AND 8
CONSTRUCTION PROGRESS
AS OF FEBRUARY 2, 2013**

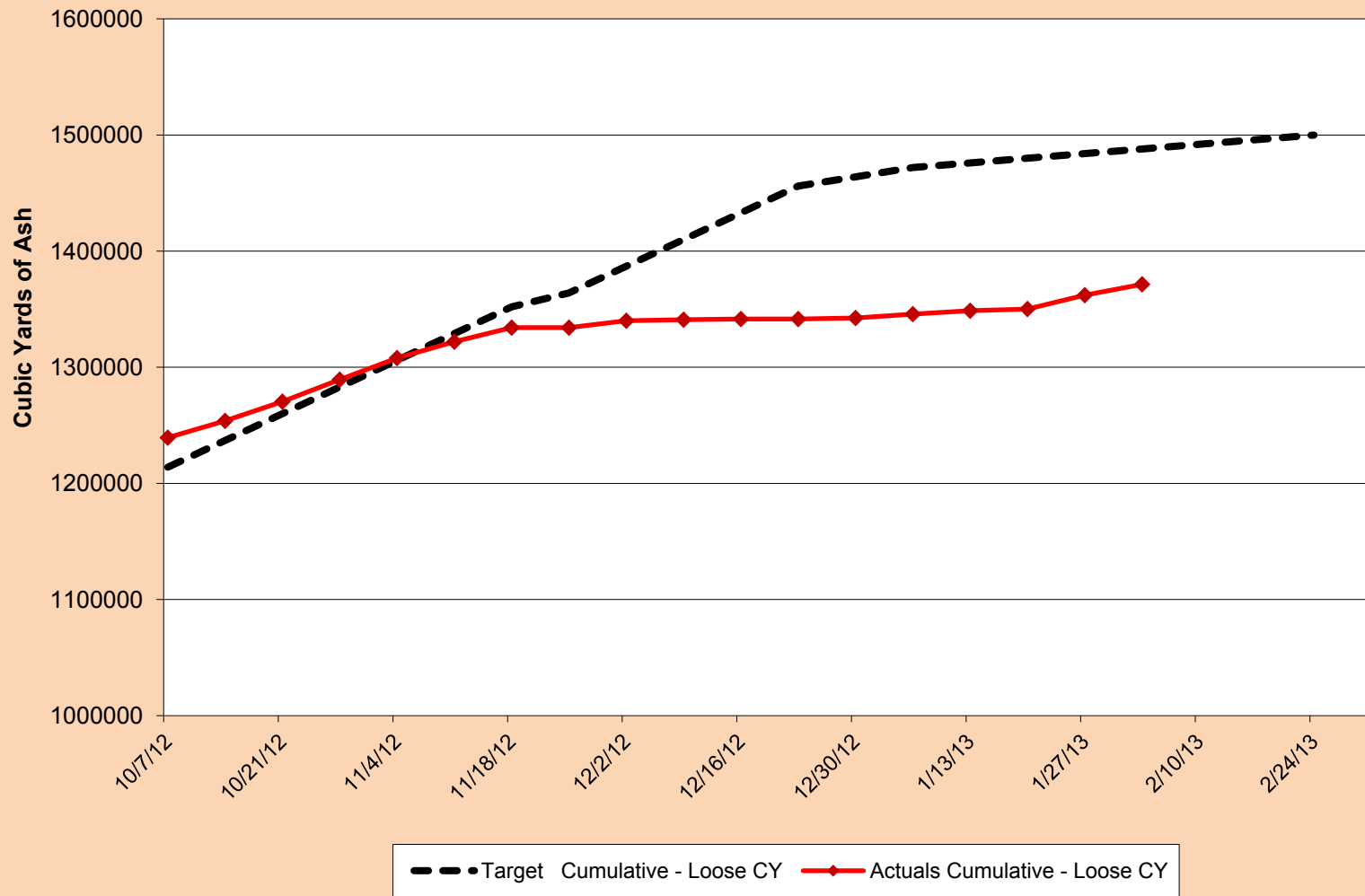


Kingston Ash Recovery Project			January, 2013		Field Report
Safety			Monthly Total	FY – Cumulative Total	
Near Misses			0	0	
First Aid Incidents			1	6	
Recordable Incidents			1	1	
Recordable Lost Time Incidents			0	0	
Environmental	Matrix	Samples	Analyses	Results	
Organization - TVA	Surface / Utility Water	5,807	48,557	243,062	
Organization - TVA	Groundwater (Spring & Well)	266	2,795	13,650	
Organization - TVA	Ash	762	1,274	9,236	
Organization - TVA	Soil / Sediment	1,767	3,390	24,148	
Organization - TVA	Biota	5,363	12,875	137,557	

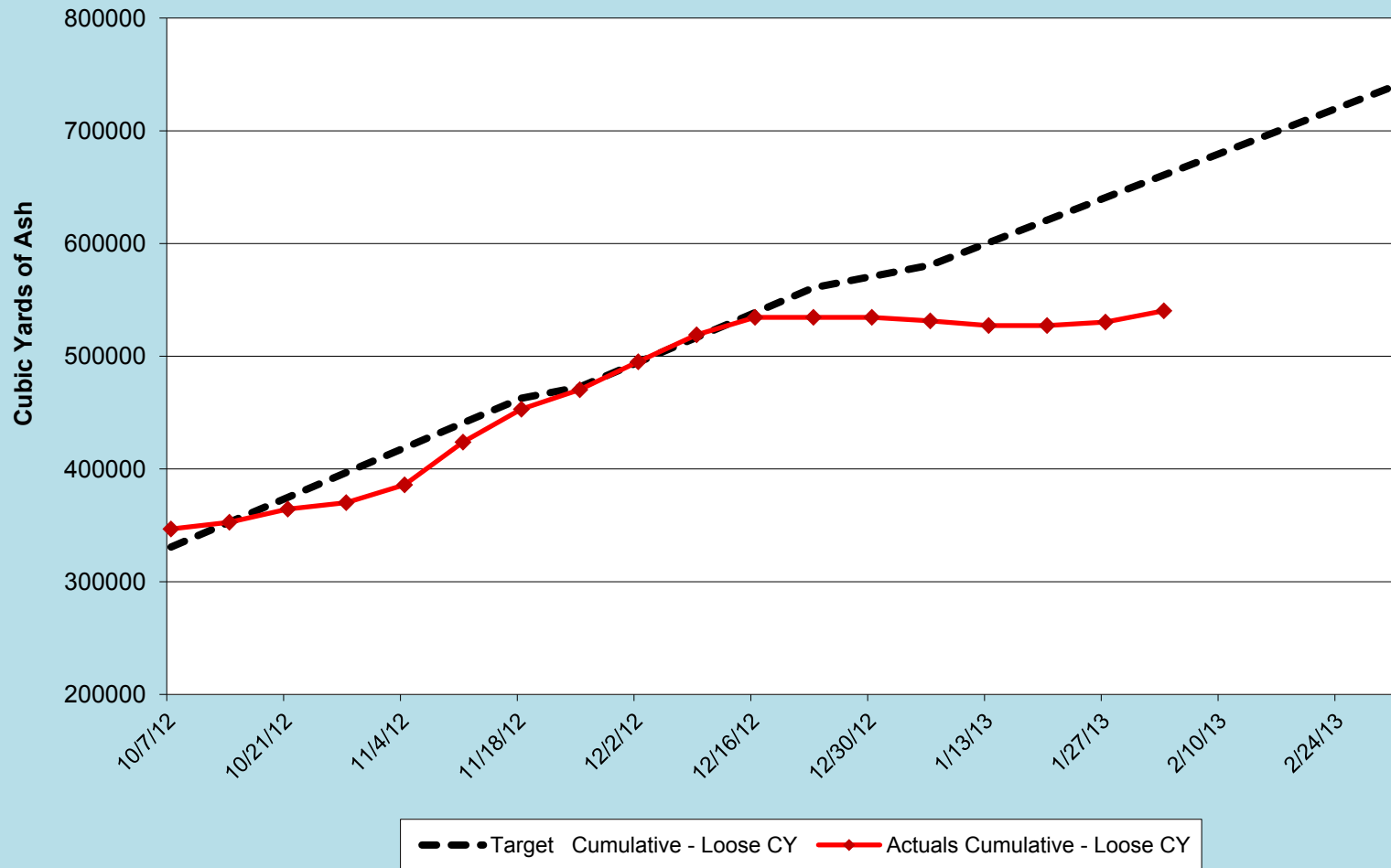
Work Description	Period Work Performed (CYIP)	PTD Work Performed (CYIP)
Ash Removal / Excavation		
Total Removed from Middle Embayment	17,782	980,785
Total Removed from North Embayment	-	1,010,322
Total Removed from Settling Basins / Dike 2	23	50,033
Excavated Total	17,804	2,041,140
Work Description	Period Work Performed (CCY)	PTD Work Performed (CCY)
Placement		
Total Placed in Dredge Cell	8,987	1,347,832
Total Placed in Lateral Expansion	8,450	616,227
Total Placed in Ash Pond	(1,240)	392,741
Total Placed in Stilling Pond	-	17,641
Placed Total	16,197	2,356,800
Work Description	Period Work Performed (CCY)	PTD Work Performed (CCY)
Storage Handling		
Total Removed from Lateral Expansion	383	54,212
Total Removed from Dredge Cell	1,731	812,466
Total Removed from Ballfield	4,185	472,048
Removed from Storage Total	6,299	1,338,725
Net Removed to(from) Ballfield Storage	(2,041)	(137,825)

For period ending January 31, 2013.

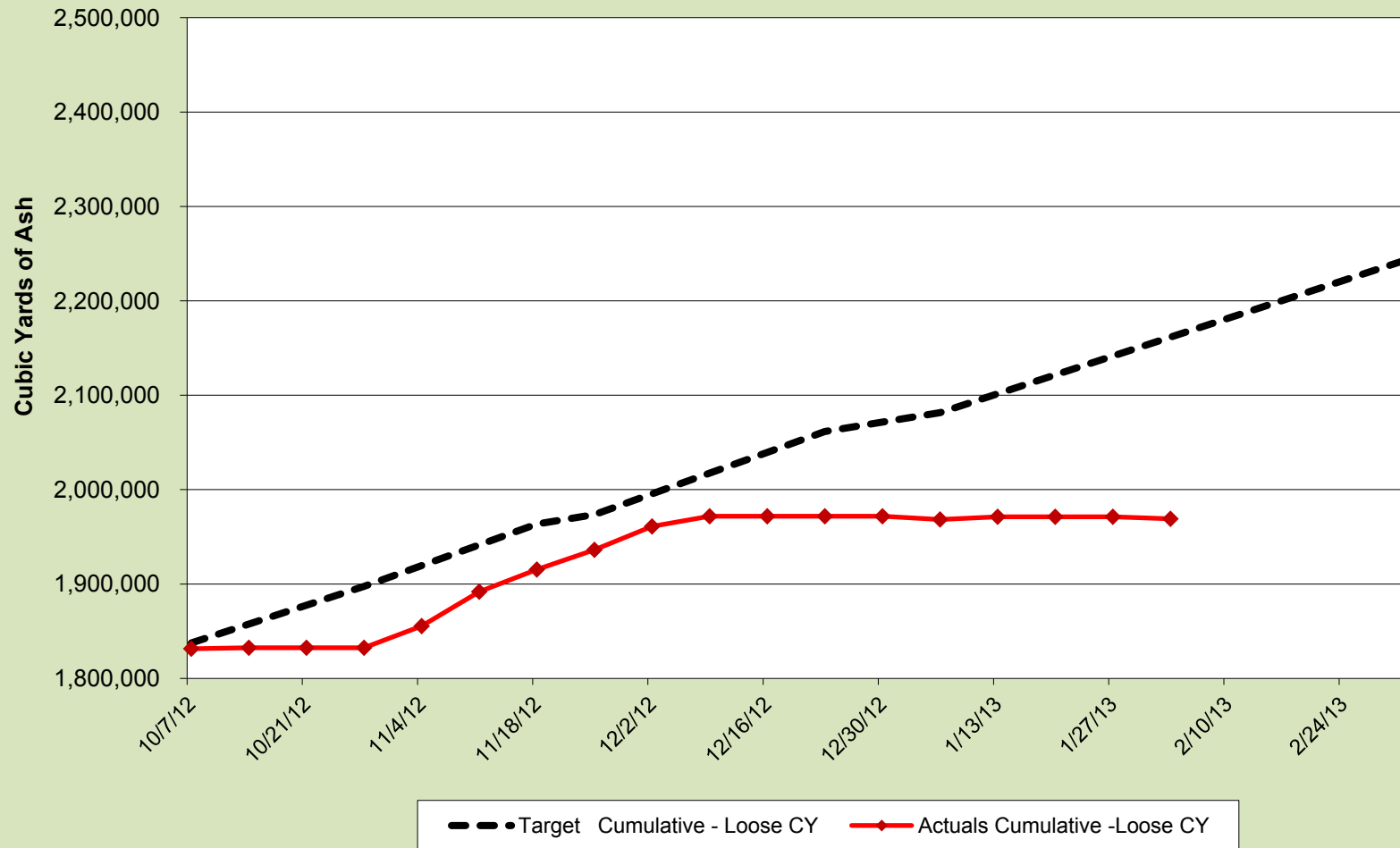
**Ash Excavation from Middle Embayment
Weekly as of January 31, 2013**



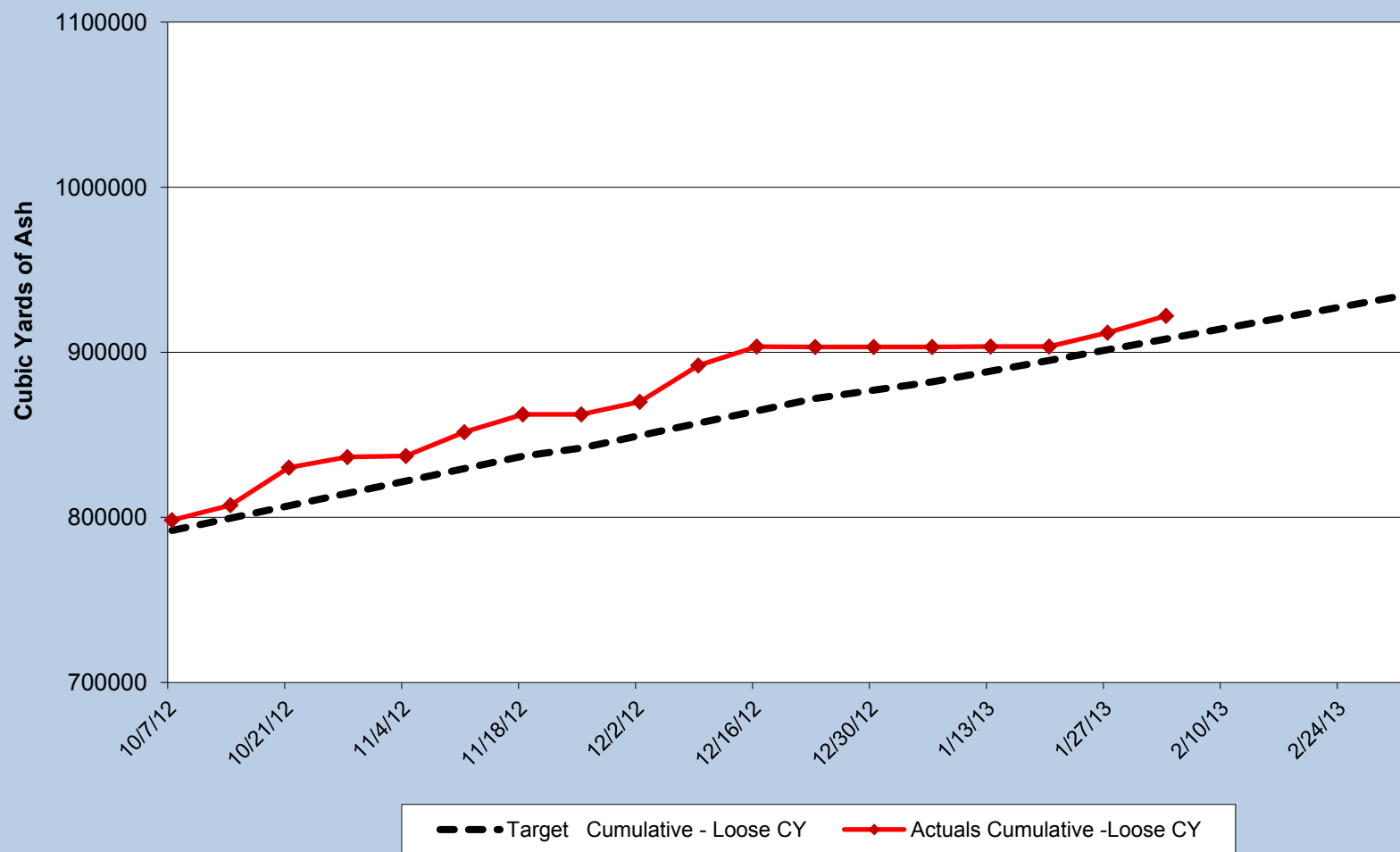
Ash Excavation from Dredge Cell Relic
Weekly as of January 31, 2013



Ash Stacking in Dredge Cell Weekly as of January 31, 2013



Ash Stacking in Lateral Expansion Weekly as of January 31, 2013



**Perimeter Wall Stabilization Segments 3 & 4
Weekly as of January 31, 2013**

